

TECHNICAL BASIS FOR TIER I OPERATING PERMIT

DATE: December 13, 2002

PERMIT WRITER: Carole Zundel

PERMIT COORDINATOR: Bill Rogers

SUBJECT: AIRS Facility No. 009-00030, Potlatch, St. Maries
Final Tier I Operating Permit

Permittee:	Potlatch Corp. – Lumber Drying Division, St. Maries Complex
Permit Number:	009-00030
Air Quality Control Region:	062
AIRS Facility Classification:	A
Standard Industrial Classification:	2421
Zone:	11
UTM Coordinates:	533.9, 5240.9
Facility Mailing Address:	2200 Railroad Ave., St. Maries, ID 83861
County:	Benewah
Facility Contact Name and Title:	Bernie Wilmarth, Environmental Manager
Contact Name Phone Number:	(208) 245-2585
Responsible Official Name and Title:	Greg Cooperrider, Plant Manager
Exact Plant Location:	Milltown Road, St. Maries, Idaho
General Nature of Business & Kinds of Products:	Lumber drying

TABLE OF CONTENTS

LIST OF ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE.....	3
PUBLIC COMMENT/AFFECTED STATES/EPA REVIEW SUMMARY	4
1. PURPOSE	5
2. SUMMARY OF EVENTS	5
3. BASIS OF THE ANALYSIS	6
4. FACILITY DESCRIPTION	6
5. REGULATORY ANALYSIS	8
6. REGULATORY ANALYSIS – EMISSIONS UNITS	13
7. INSIGNIFICANT ACTIVITIES.....	23
8. ALTERNATIVE OPERATING SCENARIOS	23
9. TRADING SCENARIOS	23
10. COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION.....	23
11. ACID RAIN PERMIT	26
12. AIRS DATABASE	26
13. REGISTRATION FEES	27
14. RECOMMENDATION.....	27
ATTACHMENT 1.....	28
ATTACHMENT 2.....	29
ATTACHMENT 3.....	30

LIST OF ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
bf	board feet
CAM	compliance assurance monitoring
CEMS	continuous emission monitoring system
cf	cubic feet
CFR	Code of Federal Regulations
CO	carbon monoxide
COMS	continuous opacity monitoring system
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
HAPs	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pounds per hour
MACT	Maximum Available Control Technology
Mbf/yr	thousand board feet per year
MMBtu	million British thermal units
NCASI	National Council of the Paper Industry for Air and Stream Improvement
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operations and maintenance
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
QIP	Quality Improvement Plan
SIP	State Implementation Plan
SO ₂	sulfur dioxide
T/yr	tons per year
VOC	volatile organic compounds

PUBLIC COMMENT / AFFECTED STATES / EPA REVIEW SUMMARY

A 30-day public comment period for the Potlatch draft Tier I operating permit was held in accordance with IDAPA 58.01.01.364 *Rules for the Control of Air Pollution in Idaho*. The comment period ran from August 8 through September 10, 2002. A public hearing was held September 9, 2002.

IDAPA 58.01.01.008.01, defines *affected states* as: "All states: whose air quality may be affected by the emissions of the Tier I source and that are contiguous to Idaho; or that are within 50 miles of the Tier I source."

A review of the site location information included in the permit application indicates that the facility is located within 50 miles of a state border. Therefore, the states of Washington and Montana were provided an opportunity to comment on the draft Tier I permit.

The only comments received during the comment period were from the Potlatch St. Maries facility. Those comments and the DEQ's responses are provided in Attachment 3 of this document.

A proposed permit was developed based on comments submitted during the public comment period. The proposed permit was then provided to the EPA for their review as required by IDAPA 58.01.01.366. The EPA provided no written objection to the permit.

1. PURPOSE

The purpose of this memorandum is to explain the legal and factual basis for this draft Tier I operating permit in accordance with IDAPA 58.01.01.362.

The DEQ has reviewed the information provided by Potlatch regarding the operation of their St. Maries Lumber Drying Division. This information was submitted based on the requirements to submit a Tier I operating permit application in accordance with IDAPA 58.01.01.300.

This part of the Title V operating permit is issued for the portion of the facility located on state lands. The EPA will issue the part of the Title V permit for the portion of the facility on located on tribal lands.

2. SUMMARY OF EVENTS

March 1993	Potlatch purchased the lumber drying division from Edwards Forest Industries, Inc. The Hurst boiler was permitted, prior to the purchase by Potlatch, by Permit to Construct (PTC) No. 0120-0008 which was issued to Edwards Forest Industries, Inc.
September 22, 1994	The DEQ received Potlatch's submittal reporting the March 1993 purchase of the boiler and dry kilns from Edwards Forest Industries, Inc.
October 17, 1994	The DEQ letter states that the PTC 0120-0008 is not transferable and specifying three options for obtaining a new PTC.
August 19, 1996	The DEQ received an application for a Tier II operating permit (Tier II).
October 9, 1996	In a letter from DEQ to Potlatch, DEQ indicates that staff have reviewed the Tier II permit application and the Potlatch St. Maries mill (on tribal land) and the Lumber Drying Division (on state land) are one facility because the lumber drying site accepts only lumber from Potlatch's St. Maries mill.
September 11, 1998	DEQ received PTC application for a wood-fired boiler and lumber drying kilns.
October 9, 1998	DEQ determined the PTC application complete.
December 18, 1998	Potlatch sent a letter to DEQ, which confirms discussions between Potlatch and DEQ, wherein DEQ indicated that the Agency is in the process of reissuing a PTC for the Lumber Drying Division.
January 6, 1999	Potlatch sent a letter to DEQ which provides a chronology of correspondence between Potlatch and DEQ relating to permitting the facility, as a follow-up to a November 19, 1998 meeting in Boise between Potlatch and DEQ.
March 31, 1999	DEQ received a PTC application for the oil and edge seal process at Potlatch.
May 5, 1999	PTC application was declared complete.
July 21, 1999	PTC 009-00001 issued for oil and edge seal process.
August 31, 1999	Tom Harman, DEQ, sends a letter to Potlatch informing Potlatch that an inspection of the facility revealed that the facility is out of compliance because it had not obtained a new PTC.

September 28, 1999	Potlatch responds to DEQ's letter of August 31, 1999 stating the facility attempted twice to obtain a permit to cover the emissions units, once on August 14, 1996 (Tier II application) and again on September 1, 1998 (PTC application).
September 26, 2000	Tier II application declared complete by DEQ.
October 4, 2000	Potlatch writes to DEQ acknowledging receipt of DEQ's September 26, 2000 incompleteness determination.
February 1, 2002	DEQ received the Tier I application from Potlatch for their lumber drying facility in St. Maries. The application was prepared by Trinity Consultants, the facility's consulting firm.
April 2, 2002	DEQ sent a letter to Potlatch declaring the Tier I application complete.
April 8, 25, and April 26, 2002	DEQ received additional information to supplement the Tier I application.
August 8 – September 10, 2002	DEQ provides draft Tier I operating permit for public comment.
September 9, 2002	DEQ provides a public hearing for the draft Tier I operating permit.
November 7, 2002	DEQ provides the proposed Tier I operating permit to the EPA.

3. BASIS OF THE ANALYSIS

The following documents were relied upon in preparing this memorandum and the Tier I:

- Tier I application, received February 1, 2002, and updates to the application by telephone on April 9, 2002 and April 11, 2002, and updates to the application by e-mail on April 25, 2002 and April 26, 2002.
- Tier II application, dated August 14, 1996.
- Potlatch St. Maries permit to construct (PTC) No. 009-00001 for the oil and edge seal process issued on July 21, 1999. *Note: This PTC was inadvertently issued with the number from the portion of the Potlatch St. Maries facility, which is on tribal land. However, the permit applies to the lumber drying facility, which is on state land.*
- Guidance developed by the EPA and DEQ.
- Title V permits issued by other jurisdictions.
- Documents and procedures developed in the Title V Pilot Operating Permit Program.

4. FACILITY DESCRIPTION

4.1 GENERAL PROCESS DESCRIPTION

The Hurst wood-waste fired boiler produces steam, which is used to heat four lumber-drying kilns. Various types of wood are dried in the kilns.

The oil and edge-seal process applies coatings to plywood panels making them suitable for use as concrete forming material. Untreated plywood panels are placed one at a time on a conveying system and transported through a modified glue spreader that uses two large rollers to apply the coating to the upper and lower surfaces of the panels. The upper surface of the panels is flood-coated with the release agent using a low-pressure sprayer nozzle before the panel goes through the spreader rolls. Excess release

agent is collected and recycled in the lower reservoir under the spreader. The panels are then stacked, and an edge-sealing compound is sprayed on the edges of the stacked panels.

4.2 FACILITY CLASSIFICATION

The facility is classified as a major facility, in accordance with IDAPA 58.01.01.008.10, for Tier I permitting purposes because the facility emits or has the potential to emit a regulated air pollutant or pollutants in excess of 100 T/yr. Emissions from that part of the facility located tribal lands are not included in this analysis. The facility is also major as defined in IDAPA 58.01.01.006.55. The facility is not a designated facility as defined in IDAPA 58.01.01.006.27. The AIRS/AFS facility classification is A. This facility is a lumber drying facility, SIC 2421.

4.3 AREA CLASSIFICATION

The facility is located in Benewah County, which is located within AQCR 62. This area is designated unclassifiable for federal and state criteria air pollutants. There are no Class I areas within 10 km of the facility.

4.4 PERMITTING HISTORY

July 21, 1999 PTC No. 009-00001 issued for the oil and edge-seal process.

See also Section 2, Summary of Events.

4.5 EMISSIONS DESCRIPTION

Emissions units include:

- One Hurst wood and waste-wood fired boiler, serial number HYB-6500-150, built in 1987 that produces steam at 34,500 lb/hr and controls particulate emissions with a multiclone. A McGill electrostatic precipitator will be added to control PM emissions by March 1, 2003.
- four Coe/Moore double-track steam-heated lumber-drying kilns installed in 1987
- the oil and edge seal operation

A summary of the maximum potential emissions is shown in Table 4.1. For the oil and edge-seal process, the VOC limit in the PTC is listed.

Table 4.1 - MAXIMUM POTENTIAL EMISSIONS

Source	PM T/yr	PM ₁₀ T/yr	CO T/yr	NO _x T/yr	SO _x T/yr	VOC T/yr
Hurst Boiler	1132.23	404.71	89.37	36.14	1.81	5.3
Kilns (4)	17.76	17.76	NA*	NA	NA	125.43
Oil and Edge-seal Process (permitted limits)	NA	NA	NA	NA	NA	39.9

*not applicable or not emitted

5. REGULATORY ANALYSIS

5.1 FACILITY-WIDE APPLICABLE REQUIREMENTS

5.1.1 Fugitive Particulate Matter - IDAPA 58.01.01.650-651

5.1.1.1 Requirement

Permit Condition 2.1 states that all reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651.

5.1.1.2 Compliance Demonstration

Permit Condition 2.2 states that the permittee is required to monitor and maintain records of the frequency and the methods used by the facility to reasonably control fugitive particulate emissions. IDAPA 58.01.01.651 gives some examples of ways to reasonably control fugitive emissions which include using water or chemicals, applying dust suppressants, using control equipment, covering trucks, paving roads or parking areas, and removing materials from streets.

Permit Condition 2.3 requires that the permittee maintain a record of all fugitive dust complaints received. In addition, the permittee is required to take appropriate corrective action as expeditiously as practicable after a valid complaint is received. The permittee is also required to maintain records that include the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

To ensure that the methods being used by the permittee to reasonably control fugitive particulate matter emissions whether or not a complaint is received, Permit Condition 2.4 requires that the permittee conduct periodic inspections of the facility. The permittee is required to inspect potential sources of fugitive emissions during daylight hours and under normal operating conditions. If the permittee determines that the fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee is also required to maintain records of the results of each fugitive emissions inspection.

Both Permit Conditions 2.3 and 2.4 require the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of receiving a valid complaint or determining that fugitive particulate emissions are not being reasonably controlled meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.2 Control of Odors - IDAPA 58.01.01.775-776

5.1.2.1 Requirement

Permit Condition 2.5 and IDAPA 58.01.01.776 both state that: *"No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids to the atmosphere in such quantities as to cause air pollution."*

5.1.2.2 Compliance Demonstration

Permit Condition 2.6 requires the permittee to maintain records of all odor complaints received. If the complaint has merit, the permittee is required to take appropriate corrective action as expeditiously as practicable. The records are required to contain the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Permit Condition 2.6 requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of receiving a valid odor complaint meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.3 Visible Emissions - IDAPA 58.01.01.625

5.1.3.1 Requirement

IDAPA 58.01.01.625 and Permit Condition 2.7 states: *"No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined . . . by IDAPA 58.01.01.625. This provision does not apply when the presence of uncombined water, NO_x, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this rule."*

5.1.3.2 Compliance Demonstration

To ensure reasonable compliance with the visible emissions rule, Permit Condition 2.8 requires that the permittee conduct routine visible emissions inspections of the facility. The permittee is required to inspect potential sources of visible emissions, during daylight hours and under normal operating conditions. The visible emissions inspection consists of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission covered by this section, the permittee must either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is determined to be greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee must take corrective action and report the exceedance in its annual compliance certification and in accordance with the excess emissions rules in IDAPA 58.01.01.130-136. The permittee is also required to maintain records of the results of each visible emissions inspection and each opacity test when conducted. These records must include the date of each inspection, a description of the permittee's assessment of the conditions existing at the time visible emissions are present, any corrective action taken in response to the visible emissions, and the date corrective action was taken.

It should be noted that if a specific emissions unit has a specific compliance demonstration method for visible emissions that differs from Permit Condition 2.8, then the specific compliance demonstration method overrides the requirement of Permit Condition 2.8. Permit Condition 2.8 is intended for small sources that would generally not have any visible emissions.

Permit Condition 2.8 requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of discovering visible emissions meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.4 Excess Emissions

5.1.4.1 Requirement

Permit Condition 2.9 requires that the permittee comply with the requirements of IDAPA 58.01.01.130-136 for startup, shutdown, scheduled maintenance, safety measures, upset, and breakdowns. This section is fairly self-explanatory and no additional detail is necessary in this technical analysis. It should; however, be noted that subsections 133.02, 133.03, 134.04, and 134.05 are not specifically included in the permit as applicable requirements. These provisions of the *Rules* only apply if the permittee anticipates requesting consideration under subsection 131.02 of the *Rules* to allow DEQ to determine if an enforcement action to impose penalties is warranted. Section 131.01 states ". . . The owner or operator of a facility or emissions unit generating excess emissions shall comply with Sections 131, 132, 133.01, 134.01, 134.02, 134.03, 135, and 136, as applicable. If the owner or operator anticipates requesting consideration under Subsection 131.02, then the owner or operator shall also comply with the applicable

provisions of Subsections 133.02, 133.03, 134.04, and 134.05.” Failure to prepare or file procedures pursuant to Sections 133.02 and 134.04 is not a violation of the *Rules* in and of itself, as stated in subsections 133.03.a and 134.06.b. Therefore, since the permittee has the option to follow the procedures in Subsections 133.02, 133.03, 134.04, and 134.05; and is not compelled to, the subsections are not considered applicable requirements for the purpose of this permit and are not included as such.

5.1.4.2 Compliance Demonstration

The compliance demonstration is contained within the text of Permit Condition 2.9. No further clarification is necessary here.

5.1.5 Open Burning

All open burning shall be done in accordance with IDAPA 58.01.01.600-616.

5.1.6 Renovation/Demolition – 40 CFR 61, Subpart M - Asbestos

The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

5.1.7 Chemical Accident Prevention Provisions – 40 CFR 68

Any facility that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, must comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:

- Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.
- The date on which a regulated substance is first present above a threshold quantity in a process.

5.1.8 Test Methods

The EPA reference test methods for each pollutant are listed in Table 2.2 in the proposed permit. It is recommended that any deviation from a reference test method be approved by the Department prior to conducting any performance or compliance test.

5.1.9 Reports and Certifications

All periodic reports and certifications required by the permit shall be submitted within 30 days of the end of each specified reporting period to the appropriate DEQ and the EPA regional office.

5.1.10 Monitoring and Recordkeeping

The permittee is required to maintain recorded data in an appropriate location for a period of at least five years in accordance with IDAPA 58.01.01.322.07.c. Though specific applicable requirements may have record retention times of less than five years, this requirement requires the permittee to maintain all recorded data for a minimum of five years, which will satisfy those shorter record retention times.

5.1.11 Fuel-Burning Equipment

The facility shall comply with IDAPA 58.01.01.676-677.

5.1.12 Recycling and Emission Reductions – 40 CFR 82, Subpart F

The purpose of 40 CFR 82, Subpart F is to reduce emissions of Class I and Class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with Section 608 of the Clean Air Act. Subpart F applies to any person servicing, maintaining, or repairing appliances except for motor vehicle emissions. Subpart F also applies to persons disposing of appliances, including motor vehicle air conditioners.

5.2 NSPS – 40 CFR 60

The lumber drying kilns are not subject to any NSPS performance standards.

The requirements under 40 CFR 60, Subpart Db apply to steam-generating units built after June 19, 1984 and with a heat input greater than 100 MMBtu/hr. Subpart Dc applies to steam-generating units constructed after June 9, 1989.

The Hurst boiler was built in 1987 and has a maximum design heat input of 48.0 MMBtu/hr. Therefore, it is not subject to the requirements of Subparts Db and Dc.

5.3 NESHAPS – 40 CFR 61 AND 63

No provision contained in either 40 CFR 61 or 63 applies to this facility.

5.4 COMPLIANCE ASSURANCE MONITORING – 40 CFR 64

The compliance assurance monitoring (CAM) rule has been determined to apply to the Hurst boiler as follows:

From 40 CFR 64.2 (Applicability), the requirements of this part shall apply to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of a list of criteria.

The Hurst boiler is a particulate matter emissions unit at a major source (Potlatch St. Maries). Therefore, the Potlatch facility is required to obtain a part 70 permit.

The list of criteria is as follows:

1. The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under paragraph (b)(1) of this section. (This section lists many exemptions that do not apply to the Hurst boiler or to Potlatch St. Maries.)

There are two emission standards for the Hurst boiler: opacity (IDAPA 58.01.01.625) and grain loading (IDAPA 58.01.01.676).

2. The unit uses a control device to achieve compliance with any such emission limitation or standard.

The Hurst boiler uses a multiclone to achieve compliance with both opacity and grain loading.

3. The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100% of the amount, in tons per year, required for a source to be classified as a major source.

The Hurst boiler has potential pre-control device emissions of PM₁₀ equal to 404 T/yr, which is greater than 100% of the major source amount (100 T/yr) for PM₁₀.

Therefore, because all three requirements are met for applicability, the CAM rule is applicable to the Hurst boiler.

For all pollutant-specific emissions units with the PTE the applicable regulated air pollutant in an amount equal to or greater than 100% of the amount required for a source to be classified as a major source, the owner or operator shall submit the information required under Section 64.4.

Section 64.1 refers to the part 70 definition of PTE, which will not allow control equipment unless that equipment is limited in a way that is enforceable to the Administrator. Because the multiclone is not permitted, it cannot be taken into account to reduce emissions.

Section 64.5 specifies that on or after April 20, 1998, the owner or operator shall submit information as part of an application for an initial part 70 or 71 permit if, by that date the application either; (i) Has not been filed; or (ii) Has not yet been determined to be complete by the permitting authority.

The boiler's PTE PM₁₀ is 404 T/yr; therefore, the deadlines in this section are applicable.

The operating permit application for the lumber drying portion of the facility and the CAM information was sent to DEQ on January 29, 2002. This date is after April 20, 1998. Therefore, subpart (1)(i) applies.

Table 5.1 shows a reference for each CAM requirement and the permit condition(s), if required, where it is addressed. Some sections of the CAM rule are not required to be addressed in the permit, such as definitions. In a telephone call between Carole Zundel at DEQ and Elizabeth Waddell at the EPA on April 4, 2002, each section of the CAM rule was discussed, and a few parts of sections were determined to be not applicable to this source, or were otherwise not required to be addressed specifically as a part of the permit. Any references to CEMS, PEMS, or COMS are not applicable because there are other allowable monitoring methods in the rule and the CEMS, PEMS, and COMS methods were not the methods chosen in this case.

Table 5.1 CAM REQUIREMENTS

40 CFR 64	Permit Term
1	Definitions- not required as a permit condition.
2	Applicability - not required as a permit condition.
3.a.1	3.16
3.a.2	3.6, 3.9
3.a.3	3.6
3.b.1	3.16
3.b.2	3.16
3.b.3	3.6, 3.8
3.b.4	3.16
3.c	3.16
4.a.1, 2, and 3	Done in operating permit application.
4.b	Done in operating permit application.
4.c.1	3.6, 3.7
4.d and e	3.19
5	Submittal deadlines – not required as a permit condition.
6.a and b	Not applicable as a permit condition.
6.c.1	3.16
6.c.1.iii	3.6
6.c.2	3.17
6.c.3	3.11, 3.12, 3.13, 3.14
6.c.4	Optional - not required as a permit condition.
6.d	3.6, 3.16
6.e	Does not apply in this case.

7.a	Not required as a permit condition.
7.b	3.11
7.c	3.12
7.d	3.13
7.e	3.14
8.a	3.15
9.a	3.21
9.b	3.22
9.b.2	Optional - not required as a permit condition.

6. REGULATORY ANALYSIS - EMISSIONS UNITS

6.1 HURST BOILER

6.1.1 Boiler Description

The Hurst boiler is a wood- and wood-waste-fired boiler that produces a maximum of 34,500 pounds of steam per hour. The boiler was constructed in 1987. Its primary purpose is to produce and supply process steam that is used as the heat source in the facility's four lumber-drying kilns. The boiler's serial number is HYB-6500-150.

6.1.2 Permit Condition 3.1 – Grain-loading - IDAPA 58.01.01.676

"The facility shall comply with the fuel burning equipment particulate emissions requirement as specified in Permit Condition 2.14."

Permit Condition 2.14 is the fuel-burning equipment particulate matter standard (IDAPA 58.01.01.676). This standard applies to fuel-burning equipment constructed after October 1, 1979, and limits particulate matter emissions to 0.08 gr/dscf, corrected to 8% oxygen, when combusting wood products.

6.1.3 Compliance Demonstration

Permit Conditions 3.3, 3.5, 3.8, and 3.18 are used to assure reasonable compliance.

- 3.3 The operational steaming rate shall be maintained at or below 120% of the average steaming rate measured during the most recent DEQ-approved, or EPA-approved compliance test which demonstrate compliance with Permit Conditions 3.1 and 3.2.
- 3.5 The permittee shall conduct a PM compliance test in accordance with Permit Conditions 2.12 and 2.13. The test shall be conducted within 12 months of issuance of the Tier I operating permit to demonstrate compliance with Permit Conditions 3.1 and 3.2, and to establish the appropriate pressure drop operating range for the multicloner, as required by 40 CFR 64.3(a)(2), to assure continuous compliance with Permit Conditions 3.1 and 3.2.
- 3.5 The permittee shall monitor and record the following information during each compliance or performance test.
 - Visible emissions using the methods and procedures contained in IDAPA 58.01.01.625.
 - Steam production rate, expressed as pounds of steam per hour (lb/hr).
 - Wood-waste fuel analysis.
 - Pressure drop across the multicloner.
- 3.18 The permittee shall keep the pressure drop within the range developed under Permit Condition 3.5. If the pressure drop deviates from the operating range developed under Permit Condition 3.5, the permittee shall inspect the multicloner for malfunctions and take any corrective action

necessary. The permittee shall record the date, duration, and magnitude of the deviations; any malfunctions and/or corrective action taken; an explanation if no corrective action is taken; and any additional information required in Permit Conditions 3.21 and 3.22. The records shall be recorded and maintained in accordance with Permit Conditions 2.10 and 3.22. The permittee shall report the deviations in accordance with General Provisions 24 and 25, and Permit Condition 3.21 and 2.9. Deviations from this allowable operating range shall not be a violation of this permit, unless the permittee fails to inspect malfunctions and/or take necessary corrective action, or an emission standard prescribed in this permit is exceeded. DEQ may consider the frequency, duration, or magnitude of the deviations to determine if additional action is required. Refer to Permit Condition 3.22 for excursions that trigger QIP.

The compliance status is demonstrated by source testing initially. If the source is in compliance during the test period, continuous compliance can be reasonably assured afterwards by maintaining the process rates within the parameters measured during the source test. Monitoring and recordkeeping of these parameters are the mechanisms used to determine the compliance status.

The steam rate is limited to a level that has demonstrated compliance with the grain-loading rule. A calculation can be used to adjust the allowable steam rate if the performance test indicates the standard is being approached at the tested steaming rate.

The permittee is required to install, operate, and keep records for a differential pressure transducer to measure the pressure drop for the multicloner. The permit specifies extensive recording, maintenance, reporting, performance testing, and operational parameter controls for this pressure drop monitoring system, in accordance with the CAM rule (40 CFR 64). A range of acceptable pressure drop values will be determined during the performance test upon which compliance was demonstrated. The permittee will then be required to document the ranges in the source-specific O&M manual and maintain and operate within those ranges.

The permittee has the option to re-test at any time during the permit term in order to revise the allowable steaming rate so long as no emission limit or standard is exceeded during the testing period.

6.1.4 Permit Condition 3.2 – Opacity - IDAPA 58.01.01.625

The facility shall comply with the visible emissions requirement specified in Permit Condition 2.7 (IDAPA 58.01.01.625).

- 2.7 No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason(s) for the failure of the emission to comply with the requirements of this section.

This standard applies to the boiler because the boiler stack is a point source.

6.1.5 Compliance Demonstration

The same type monitoring and recordkeeping is required for the opacity standard as is required for the grain-loading standard. Performance testing will show the compliance status with regard to the grain loading and opacity standards.

In addition, for opacity, Permit Condition 2.8 will be used as a periodic monitoring tool for compliance purposes.

- 2.8 Unless specified elsewhere in this permit, the permittee shall conduct a monthly Facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no see evaluation for

each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each monthly visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed); any corrective action taken in response to the visible emissions; and the date corrective action was taken.

6.1.6 Permit Condition 3.3 – Steaming rate - IDAPA 58.01.01.322.01, 3/19/99; IDAPA 58.01.01.322.06, 07, 08, 5/1/94]

The steaming rate permit condition is required to reasonably assure compliance with the opacity and grain-loading standards. See the discussion in section 6.1.3 of this document.

6.1.7 Compliance Demonstration

3.4 The permittee shall install, operate, calibrate, and maintain a monitor to continuously monitor the steaming production rate of the Hurst boiler. The records shall be maintained in accordance with Permit Condition 2.10. If the continuous steaming rate measurement system becomes inoperable, a backup monitoring method consisting of manual hourly readings or calculations shall be implemented within 96 hours of the continuous steaming rate measurement system becoming inoperable, and shall be used until the original system is operational.

3.10 An O&M manual shall be developed by the permittee within 60 days of issuance of this permit. The O&M manual shall address the operation, maintenance, and repair of the Hurst boiler, multiclone, and multiclone pressure drop monitoring device. The manual shall include, at a minimum, a general description of the boiler, multiclone, and pressure drop monitoring device; the normal operating conditions; the wood-waste fuel analysis results from most recent source test that demonstrates compliance with Permit Conditions 3.1 and 3.2; startup, shutdown, maintenance, and upset conditions procedures; and corrective action procedures. The O&M manual shall remain onsite at all times, shall be updated when any operating conditions are revised, and shall be made available to Department representatives upon request. The multiclone pressure drop operating range shall be developed using manufacturer specifications and recommendations, and the results of the most recent source test that demonstrates compliance with Permit Conditions 3.1 and 3.2.

To demonstrate compliance, the permittee is required to install, operate, calibrate, and maintain a monitor to continuously monitor the steaming production rate of the Hurst boiler. A backup method of manually reading or calculating the steam rate each hour, is required if the continuous monitor becomes inoperable. An O&M manual is required for the operation of the boiler and multiclone.

6.1.8 Permit Condition 3.10 – Operations and maintenance manual - IDAPA 58.01.01.322.06.d, 5/1/94.

IDAPA 58.01.01.322.06.d: Requirements that the DEQ determines are necessary, concerning the use, maintenance, and installation of monitoring equipment or methods.

See section 6.1.7 of this document.

6.1.9 Compliance Demonstration

See section 6.1.7 of this document.

6.1.10 Permit Condition 3.5 – Compliance test - IDAPA 58.01.01.322.06.d, and 40 CFR 64.3(a)(2), 64.3(b)(3), 64.4(c)(1), 64.6(c)(1)(iii), 64.6(d)

IDAPA 58.01.01.322.06(d): *Requirements that the DEQ determines are necessary, concerning the use, maintenance, and installation of monitoring equipment or methods.*

The permittee is required to conduct a PM performance test within 12 months of permit issuance to demonstrate compliance with the grain-loading and opacity limits. The performance test will also determine an acceptable opacity and PM pressure drop range for the multicclone. This satisfies the requirements of the above-referenced sections of the CAM rule.

6.1.11 Compliance Demonstration

The following are the permit conditions that show compliance with the requirement to conduct a performance test.

- 3.8 The permittee shall monitor and record the following baseline test information during source testing, including, but not limited to visible emissions evaluated in accordance with procedures contained in IDAPA 58.01.01.625:
- Steam production rate (lb/hr)
 - Wood waste fuel analysis data
 - Pressure drop across the multicclone
- 3.6 If the particulate grain loading measured in the initial performance test is less than or equal to 75% of the emission standard in IDAPA 58.01.01.676, no further testing shall be required during the permit term. If the particulate grain loading measured during the initial performance test is greater than 75% but less than or equal to 90% of the emission standard in IDAPA 58.01.01.676, a second test shall be required in the third year of the permit term. If the initial particulate grain loading measured during the performance test is greater than 90% of the emission standard in IDAPA 58.01.01.676, the permittee shall conduct a performance test annually.
- 3.7 The permittee may conduct additional performance tests during the permit term to revise the allowable steaming rate so long as the performance tests conform to all requirements of this permit.

The permittee is required to send in a test plan and have the test plan approved by DEQ prior to performing the test, as per 40 CFR 64.4(d) and (e). The permittee must also send in a test report within 30 days after finishing the test. The test must be conducted within 12 months of permit issuance.

6.1.12 Permit Condition 3.10 – Requirement to use multicclone - IDAPA 58.01.01.322.01

IDAPA 58.01.01.322.01:

All Tier I operating permits shall contain emission limitations and standards, including, but not limited to, those operational requirements and limitations that assure compliance with the applicable requirements identified in the application, or determined by the DEQ to be applicable to the source.

- 3.10 The multicclone shall be used to control particulate emissions from the Hurst boiler at any time the boiler is in operation.

This permit condition is an operational requirement to reasonably assure compliance with the grain loading, opacity, and CAM rule applicable requirements.

6.1.13 Compliance Demonstration

Compliance will be determined using Permit Condition 2.10. The permittee is required to maintain sufficient recordkeeping to assure compliance with all the terms and conditions of the permit.

2.10 The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Recording of monitoring information shall include, but not be limited to: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available to DEQ representatives upon request in either hard copy or electronic format.

6.1.14 Permit Condition 3.11 – Maintain monitoring of multiclone - 40 CFR 64.7(b), 64.6(c)(3)

The permit requirement is a direct quote from 40 CFR 64.7(b). Monitoring is defined in 40 CFR 64.1.

3.11 At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

The other requirement that is referenced is 40 CFR 64.6(c)(3), which states that at a minimum, the permit shall specify: (3) the obligation to conduct the monitoring and fulfill the other obligations specified in 64.7 through 64.9.

6.1.15 Compliance Demonstration

Permit Condition 3.10 requires that an O&M manual be developed and include a monitoring maintenance plan. Monitoring data, any malfunctions of the equipment, and corrective action taken are required to be reported.

6.1.16 Permit Condition 3.12– Collect data for monitoring system - 40 CFR 64.7(c), 64.6(c)(3)

40 CFR 64.7(c):

Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

3.12 Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall collect data for the multiclone pressure drop monitoring system at

all required intervals at all times that the Hurst boiler is operating, in accordance with 40 CFR 64.7(c).

The permittee is required by the CAM rule to collect data for the multiclone pressure drop monitoring system at all times the Hurst boiler is operating.

6.1.17 Compliance Demonstration

The compliance determination method is required by Permit Condition 3.16.

- 3.16 The permittee shall install a differential pressure transducer to measure the pressure drop across the multiclone. The monitoring system shall calculate 15-second block averages of the pressure drop, when the multiclone is operating. The system shall record the 15-second block values, as well as the hourly average of the 15-second block values, and each exceedance of the 15-second block value. The permittee shall manually record the readings once per 8-hour shift, when operating. The equipment shall be installed and calibrated according to the manufacturer specifications. The transmitter shall be calibrated at least annually. This system shall be installed prior to conducting any PM performance test required by Permit Conditions 3.6 or 3.9. In designing monitoring, the permittee shall comply with the provisions in 40 CFR 64.3.c for evaluation factors.

6.1.18 Permit Condition 3.13 – Restore normal operation after excursion - 40 CFR 64.7(d), 64.6(c)(3)

Regulation 40 CFR 64.7(d) addresses the requirements for response to excursions or exceedances.

- 3.13 Upon detecting an excursion or exceedance, the permittee shall restore operation of the Hurst boiler, the multiclone, and the pressure drop monitoring system to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and in accordance with the provisions of 40 CFR 64.7(d).

6.1.19 Compliance Demonstration

The term "excursion" is defined in Permit Condition 3.17.

- 3.17 For the multiclone differential pressure transducer, for particulate matter, an excursion occurs when the one-hour rolling average of the 15-second block pressure drop value falls outside the acceptable range. For opacity, an excursion is defined as when the pressure drop, block-averaged every 15 seconds, falls outside of the acceptable range for more than three minutes total within a rolling 60-minute period. The alarm settings for both standards shall be determined when the appropriate pressure drop ranges are determined from the performance test required by Permit Conditions 3.5 or 3.7.

This explanation is used for Permit Condition 3.21, which requires the permittee to report information that will be used to determine the compliance status of the requirements in Permit Condition 3.13.

- 3.21 The permittee shall submit a report for monitoring required by 40 CFR 64. The report shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable:
- Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances and the corrective actions taken;
 - Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - A description of the actions taken to implement a Quality Improvement Plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or

operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

6.1.20 Permit Condition 3.14 – Notify DEQ if a failure to achieve compliance is identified - 40 CFR 64.7(e), 64.6(c)(3)

40 CFR 64.7(e):

Documentation of need for improved monitoring. After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

3.14 If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the DEQ and, if necessary, submit a proposed modification to this operating permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

The permittee is required by the CAM rule to notify DEQ if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion.

6.1.21 Compliance Demonstration

Permit Condition 3.14 requires that the permittee promptly notify DEQ and, if necessary, submit a proposed modification to the operating permit to address the necessary monitoring changes.

6.1.22 Permit Condition 3.15 – QIP trigger - 40 CFR 64.8(a)

40 CFR 64.8(a):

Based on the results of a determination made under 64.7(d)(2), the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with 64.6 (c)(3), the part 70 or 71 permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5% duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

3.15 If the cumulative time that the pressure drop monitoring system indicates an excursion condition as defined in Permit Condition 3.17 exceeds 13,140 minutes in any six month period (5% per semiannual reporting period, 40 CFR 64.8(a)), a QIP shall be developed and implemented in accordance with 40 CFR 64.8.

The permittee is required by the CAM rule to work with DEQ to develop a QIP if the pressure drop monitoring system indicates an excursion for more than 5% of the time in a six-month time period.

6.1.23 Compliance Demonstration

Compliance is assessed using the information provided in accordance with Permit Condition 3.15 and Permit Condition 3.21.

If the cumulative time that the pressure drop monitoring system indicates an excursion condition exceeds 13,140 minutes in any six month period, a QIP shall be developed by the permittee and implemented in accordance with 40 CFR 64.8.

6.2 LUMBER-DRYING KILNS

6.2.1 Lumber-Drying Kilns Description

Four Coe/Moore double-track steam-heated lumber dry kilns, installed in 1987, are used to dry different types of lumber. Steam is supplied by the Hurst wood-waste-fired boiler. The emissions from the kilns are uncontrolled.

6.2.2 Permit Condition 4.1 – Process Weight - IDAPA 58.01.01.701

Process weight PM emissions limitations apply to the kilns. The requirement is as follows:

4.1 No person shall emit into the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

a. If PW is less than 9,250 pounds per hour, $E = 0.045(PW)^{0.60}$

b. If PW is equal to or greater than 9,250 pounds per hour, $E = 1.10(PW)^{0.25}$

The process weight rate rule applies to the four kilns because these kilns emit particulates and commenced operation on or after October 1, 1979. The emissions are limited according to the equation written in the permit.

6.2.3 Compliance Demonstration

The dry kiln capacity is 222,000 Mbf/yr for all kilns combined. The emission factor for PM/PM₁₀ used is 0.082 pounds per thousand board feet. The emission factor is published by NCASI. This results in a maximum PTE of 9.1 T/yr of PM/PM₁₀.

The following calculations establish the lumber drying kilns process weight and the corresponding PM emissions limitation.

1) Determine the process weight. Analysis assumes continuous operation (8,760 hr/yr).

$$(32 \text{ lb/cf}^1) \times (0.054 \text{ cf/bf}^2) \times (222 \text{ Mbf/year}) / (8760 \text{ hr/yr}) = 43,792 \text{ lb/hr}$$

¹ AP-42, Appendix A, density of Douglas fir (representative density for all lumber species).

² Conversion from cf to bf.

2) Determine the allowable PM emissions based on process weight established in equation 1 above.

The PM process weight limitation for sources constructed on or after October 1, 1979, and having a process weight above 9,250 lb/hr, is determined using the following equation (IDAPA 58.01.01.701):

$$E = 1.10(PW)^{0.25}$$

$$E = 1.10(43,792)^{0.25} = 15.9 \text{ lb/hr}$$

3) Determine the actual hourly PM emissions based on the design capacity of the kilns:

$$222,000 \text{ Mbf/yr} \times 0.082 \text{ lb PM/Mbf lumber} / 8760 \text{ hr/yr} = 2.1 \text{ lb/hr}$$

The emission estimate above (equation 3) is the PTE for the lumber drying kilns based on the design capacity of the kilns. This capacity limitation inherently limits emissions. As can be seen, actual emissions will never exceed the allowable emissions limitation due to the design constraint of the kilns.

Attachment 1 is a spreadsheet supplied by Potlatch showing four scenarios using the process weight of lumber dried in the kiln and the drying time required to demonstrate that the process weight rate rule will never be exceeded under any operating scenario.

6.2.4 Permit Condition 4.2 – Opacity - IDAPA 58.01.01.625

Permit Condition 4.2 states the facility shall comply with the opacity requirement as specified in Permit Condition 2.7. Permit Condition 2.7 is the visible emissions requirement of IDAPA 58.01.01.625.

The kilns have points of emissions, so the opacity rule is applicable. The permit does not contain any other compliance demonstration requirement for the lumber drying kilns other than Permit Condition 2.7. That requirement is provided below.

6.2.5 Compliance Demonstration

4.3 The permittee shall conduct monthly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible particulate matter emissions are observed for any emissions point, a six-minute observation using EPA Method 9 shall be conducted. The visible emissions evaluation shall be performed during daylight hours under normal operating conditions. The results of each evaluation shall be recorded and maintained as required in Permit Condition 2.11. If four consecutive monthly Method 22 observations indicate that no visible particulate matter emissions are observed from any of the four observations or if four consecutive monthly six-minute observations using Method 9 indicate that opacity is below 20 percent for each of the four six-minute observations, or any combination of four consecutive monthly Method 22 or Method 9 observations, the frequency of observations decreases to once per quarter. If any quarterly Method 9 observation indicates opacity is greater than 20 percent, the observation frequency reverts to monthly.

6.3 OIL AND EDGE SEAL PROCESS

6.3.1 Oil and Edge Seal Process Description

The oil and edge seal process applies coatings to plywood panels making them suitable for repeated use as concrete-forming material. Plywood panels are placed one at a time on a conveying system and transported through a modified glue spreader that uses two large rollers to apply the coating to the upper and lower surfaces of the panels. The upper surface of the panels is flood-coated with the release agent using a low-pressure sprayer nozzle before the panel goes through the spreader rolls. Excess release agent is collected and recycled in the lower reservoir under the spreader. The panels are then stacked, and an edge-sealing compound is sprayed on the edges of the stacked panels.

A PTC for this process was issued on July 21, 1999.

There are no control devices for VOC or particulate emissions.

The spray operation for the oil application process is not under pressure and does not create particulate emissions, according to Bernie Wilmarth of Potlatch in a telephone call to Carole Zundel of DEQ on April 9, 2002. The low-pressure sprayer nozzle on the panel coating operation applies the coating to a roller through a glue applicator that pumps the material up to the applicator, then the material flows by gravity onto the roller. The roller then applies the coating to the plywood. Therefore, the process weight rate requirement, IDAPA 58.01.01.701, is not applicable to the oil-coating process because there are no particulate emissions from this process.

For the edge-seal process, the material is applied using a spray applicator. The quantity of coating used is inherently limited by the plywood process rate. Attachment 2 is a table that shows the estimated particulate emissions from the coating process and shows a comparison of the estimated emissions to the process weight rate limit. The emissions estimate is based on the solids content of the coating and the standard application rate, assuming that half of the solids applied are emitted as particulate matter. The table shows that the process weight rate rule will never be exceeded. The table does not take into account that emissions occur inside a building. The building acts as a particulate control device. The particulate emissions will be reduced by an estimated 60% (DEQ engineering estimate). This reduces the emissions to less than one pound per hour. Therefore, the process weight rate requirement does not apply to this operation.

6.3.2 Permit Condition 5.1 – VOC Emission Limit - PTC No. 009-00001

This requirement is copied from PTC No. 009-00001.

5.1 VOC emissions from the oil and edge-seal process shall not exceed 39.9 T/yr.

6.3.3 Compliance Demonstration

This permit condition was taken directly from PTC No. 009-00001.

5.3 The maximum VOC usage from the oil and edge-seal process shall not exceed 39.9 tons per any consecutive 12-month period. Volatile organic compound usage shall be calculated on a daily basis using the following equation:

$$VOC = \sum_{i=1}^n (X_i \times Y_i)$$

Where:

VOC	=	VOC usage in pounds per day;
n	=	Number of coatings used
X _i	=	Usage of coating i per day;
Y _i	=	Weight percent of VOC contained in coating i

Note: *Coating* refers to any VOC-containing compound used in surface-coating or edge-sealing the plywood panels.

6.3.4 Permit Condition – Opacity - PTC No. 009-00001

This requirement is copied from PTC No. 009-00001.

5.2 Visible emissions from any stack, vent, or functionally equivalent opening associated with the oil and edge seal process shall not exceed 20% opacity for more than three minutes in any 60-minute period, in accordance with IDAPA 58.01.01.625 and as determined by procedures contained in IDAPA 58.01.01.625.

6.3.5 Compliance Demonstration

See Section 5.1.3.2 regarding Permit Condition 2.8.

7. INSIGNIFICANT ACTIVITIES

Listed below are the insignificant activities described by the source in accordance with IDAPA 58.01.01.317:

Description	Insignificant Activities Section Citation IDAPA 58.01.01.17.01.b.i
ME-86 LDD Hurst boiler pop-off valve	a.i.77
ME-86 LDD Hurst boiler blow down pit	a.i.80
ME-86 LDD hog fuel pile	b.i.30
ME-86 LDD 1,000-gallon diesel tank	b.i.2
ME-86 LDD diesel fuel pump (electric)	b.i.2
ME-86 LDD maintenance welding	a.i.64 and b.i.9

8. ALTERNATIVE OPERATING SCENARIOS

Section 3 in the proposed permit identifies alternative operating scenarios for an electrostatic precipitator. Whenever a change is made from one operating scenario to another, the change must be recorded in a log, and the permittee is required to notify DEQ in writing.

9. TRADING SCENARIOS

No trading scenarios have been proposed.

10. COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION

10.1 COMPLIANCE PLAN AND SCHEDULE

The Hurst boiler, the multiclone, and the four lumber-drying kilns were previously owned and operated by Edwards Forest Industries, Inc. (Edwards). Permit to Construct No. 0120-0008 was issued by DEQ for their construction. Potlatch purchased the Edwards facility in March 1993; however, a permit application to transfer ownership was not submitted to DEQ until 1994. In accordance with the PTC General Conditions: *"This permit is not transferable to another person, place, or piece or set of equipment."* No

permit shield is implied or explicit for past new source review, PSD, or for any applicable requirement not specifically identified in the permit.

The DEQ has determined that the most appropriate course of action to bring the facility into compliance with the requirements is to issue a single facility-wide permit that:

- a) Specifically establishes the operating terms and conditions required by the PTC rules for sources for which a permit was required but not obtained; and
- b) Collectively addresses the operating terms and conditions required to demonstrate that emissions from all sources at the facility will not contribute to the violation of an applicable standard.

DEQ is, therefore, requiring a combined Tier II and PTC (hereafter, referred to as the facility-wide permit). The Tier II for Potlatch is required in accordance with IDAPA 58.01.01.401.03 based on the determination that specific emission standards, or requirements on operation or maintenance are necessary to ensure compliance with any applicable emission standard or rule. The facility-wide permit will contain the terms and conditions necessary for the facility to comply with the applicable requirements of IDAPA 58.01.01.400 through 410.

The facility-wide permit will also include all of the terms and conditions for new or modified sources. For those sources within the facility that have existing PTCs, the terms and conditions will be incorporated into the new permit. For sources at the facility for which a PTC was required but the facility does not have a permit, the permit will establish new emission limits, controls, and other requirements in accordance with the applicable portions of IDAPA 58.01.01.200 through 223. The new facility-wide permit will address all applicable emission standards, required emission control technology, and demonstrate that the facility will not cause or contribute to any ambient air quality standard or applicable prevention of significant deterioration (PSD) increment.

The combined Tier II and PTC is different than, and separate from, the Tier I in that the new permit will establish new applicable emission limits, controls, and other requirements that are as stringent as the requirements contained in or enforceable under the state implementation plan. This permit will create new underlying requirements for sources that are in existence at the time the initial Tier I is issued. A Tier I permit modification will, therefore, need to be issued concurrently with the issuance of the new facility-wide permit.

The applicable requirements established in the facility-wide permit pursuant to IDAPA 58.01.01.200 through 223 shall be clearly identified as such in the permit and shall remain in full force and effect until such time as they are modified or terminated in accordance with the procedures for issuing a PTC.

The specific compliance schedule elements and milestones to achieve compliance are described below.

Permit Condition 6.2. The permittee will be required to submit a complete permit application with all supporting information and documentation for issuance of a facility-wide permit in accordance with IDAPA 58.01.01.400 through 410 no later than 180 days from the final issuance date of the Tier I. A facility-wide permit is required by DEQ to establish the terms and conditions necessary to comply with an applicable rule or standard. The DEQ shall consider the emissions from all sources at the facility and the specific requirements for individual sources in preparing the facility-wide operating permit.

Potlatch did submit a Tier II application for the emissions units at their St. Maries Lumber Drying Division on August 14, 1996. That application, however, does not include a modeling assessment, nor does it contain currently available emission factors for estimating emissions from the lumber-drying kilns. Potlatch has requested they be allowed to provide updated emission factors and emissions estimates they feel more accurately reflect emissions from the kilns.

The updated permit application shall clearly identify all emissions units at the facility—listing currently permitted emissions units, exempted units for which the facility maintains exemption documentation, units

constructed before and not modified since January 24, 1969, and units constructed and/or modified since January 24, 1969 which do not have a permit. Application information shall provide facility information and emissions data for all emissions units in accordance with IDAPA 58.01.01.402 and 403 and shall include a demonstration that the sources at the facility will not cause or significantly contribute to a violation of the NAAQS or of any applicable PSD increment.

The application submittal deadlines have been set to reasonably accommodate updating and organizing the emissions unit descriptions and emissions data, and conducting ambient air quality modeling for all sources. Applications that are deemed or remain incomplete beyond the 180-day milestone shall constitute a violation of this permit condition.

Permit Condition 6.3. In addition to the information submitted under Permit Condition 6.2, the permittee is required to submit all of the information necessary to address the applicable requirements for PTCs in accordance with IDAPA 58.01.01.200 through 223 for the construction and/or modification of sources for which the permittee was required but does not have a PTC. The information must include all information to address the additional permit requirements for new major facilities or major modifications where construction without enforceable limits may have triggered PSD or nonattainment new source review (NSR) requirements.

This data must be submitted with the complete permit application required under Permit Condition 6.2 in order to issue a single combined permit. The information is, therefore, due no later than 180 days from the final issuance date of the Tier I. Failure to include complete information for addressing the PTC requirements within the required timeframe shall constitute a violation of this permit condition.

Permit Condition 6.4. If through the development of the facility-wide permit, any other source or sources are identified that should have obtained a PTC or PTC modification and for which the applicant did not include the information under Permit Condition 6.3, a supplemental application that contains all of the information necessary to address the applicable requirements for PTCs in accordance with IDAPA 58.01.01.200 through 223 shall be submitted no later than 30 days after receiving written notification from DEQ. Supplemental applications that are deemed or remain incomplete beyond the 30-day milestone shall constitute a violation of this permit condition.

Permit Condition 6.5. If the permittee can clearly demonstrate that the data required for the facility-wide permit cannot be collected and organized within the specified timeframe, the permit application submittal deadlines may be extended at the discretion of the Department for a specific time period not to exceed one year. For DEQ to consider a request for an extension without jeopardizing the terms and conditions of the permit, the request must be submitted by the facility no later than the midpoint of the compliance milestone timeline. The request must be submitted in writing with a clear demonstration why the data cannot reasonably be submitted within the specified timeframe. An example of information that might justify an extension is the absence of ambient monitoring data required to complete a PSD application.

The DEQ will review the request and the justification and approve or disapprove the extension in writing. The responsibility for meeting the schedule if the DEQ has not issued a written extension belongs to the permittee.

Permit Condition 6.6. The DEQ intends to draft and issue a single facility-wide permit to bring the permittee back into compliance. This permit will fully meet all of the applicable requirements in the *Rules* and the federally approved state implementation plan. Because the permit will contain both elements of PTCs and of Tier II permits, it will clearly identify the origin and basis for each term and condition. The terms and conditions established pursuant to the PTC requirements shall be clearly marked and shall not expire with any Tier II operating permit term. The terms and conditions established pursuant to the Tier II requirements shall be clearly marked and shall be implemented in accordance with the Tier II process. The procedures for issuing a PTC in IDAPA 58.01.01.209 shall be followed concurrently with the procedures for issuing a Tier II in IDAPA 58.01.01.404. The permit shall clearly state that any future modification of a term or condition in the permit shall be subject to the appropriate procedural requirements on which the original term or condition was based.

Permit Condition 6.7. Within 30 days after the facility-wide permit application is determined complete by DEQ, the permittee will need to request a significant permit modification to the Tier I in accordance with IDAPA 58.01.01.382.02. A significant Tier I modification will require the payment of fees in accordance with IDAPA 58.01.01.389.06.b.iii. Because the information in a complete application as required under Permit Condition 6.2 and 6.3 should contain all of the technical information necessary to modify the Tier I, DEQ may waive portions of the standard application requirements as appropriate provided the permittee certifies the completeness, truth, and accuracy of all documents submitted.

The Tier I modification shall be processed concurrently with the facility-wide permit in accordance with the procedures for issuing a Tier I in IDAPA 58.01.01.360 through 369.

Permit Condition 6.8. The permittee shall be required to submit a progress report at the end of each calendar quarter (January 1, April 1, July 1, and October 1) of each year stating when each of the conditions of each milestone were or will be achieved. A detailed explanation is required when milestones were not or will not be achieved in accordance with the schedule.

Permit Condition 6.9. The incorporation of the compliance schedule into the Tier I operating permit does not sanction noncompliance with the applicable rules.

11. ACID RAIN PERMIT

The Potlatch lumber drying division is not subject to the Acid Rain permitting requirements of 40 CFR 72 through 75. This facility is not listed in Tables 1, 2, or 3 of 40 CFR 72.6. The facility commenced commercial operation before November 15, 1990 and that did not nor does not currently, serve a generator with a nameplate capacity of greater than 25 MWE.

12. AIRS DATABASE

AIRS/AFS FACILITY-WIDE CLASSIFICATION DATA ENTRY FORM

AIR PROGRAM							AREA CLASSIFICATION
POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	TITLE V	A – Attainment U – Unclassifiable N – Nonattainment
SO ₂	B						U
NO _x	B						U
CO	B						U
PM ₁₀	A					A	U
PT (Particulate)	A					A	U
VOC	SM						U
THAP (Total HAPs)	B						
			APPLICABLE SUBPART				

AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is Unapplied to each pollutant which is below the 10 T/yr threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

13. REGISTRATION FEES

This facility is a major facility as defined by IDAPA 58.01.01.008.10; therefore, registration and registration fees, in accordance with IDAPA 58.01.01.387, apply.

14. RECOMMENDATION

Based on the Tier I application and review of the federal regulations and state rules, staff recommends that DEQ issue final Tier I operating permit No. 009-00030 to Potlatch Corp. for their St. Maries facility..

CZ/bh \\DEQ-STO\GROUPS\Air Quality\Stationary Source\SS Ltd\T1\Potlatch St Maries\Final\T1-9608-161-1 Final TM.doc

cc: Tom Harman, Coeur d'Alene Regional Office Laurie
Sherry Davis, Air Quality Division
Kral, EPA Region 10

ATTACHMENT 1

Process Weight Rate

Lumber-Drying Kilns

Demonstration of Compliance With the Process Weight Rate Rule for the Dry Kilns at SMC Lumber Drying Division									
Product	Vol/B.F. (ft ³) ¹	Kiln Charge (MBF)	Density of Wood @ 19 % Moisture Content (lb/ft ³) ²	Wt. Of Charge (Process Wt.) (lb @ 15% m.c.) ²	Drying Time (hr)	Emission Factor (lb/MBF)	Estimated Actual Emissions (lb/hr)	Allowable Emissions, based on PWR Formula (lb/hr)	Notes
Highest Weight per Charge (Douglas-fir 2x4)	0.05468	158.7	34.9	302,852	96	0.082	0.14	25.8	Highest weight processed in one kiln at one time, longest schedule.
Highest Weight per Charge (Douglas-fir 2x4)	0.05468	158.7	34.9	302,852	13	0.082	1.00	25.8	Highest weight processed in one kiln at one time, shortest schedule.
Lightest Weight per Charge (western red- cedar 1x4)	0.05525	46.6	23.8	61,325	96	0.082	0.04	17.3	Lowest weight processed in one kiln at one time, longest schedule.
Lightest Weight per Charge (western red- cedar 1x4)	0.05525	46.6	23.8	61,325	13	0.082	0.29	17.3	Lowest weight processed in one kiln at one time, shortest schedule.
¹ The volumes given are for dry, planed lumber. Green lumber volumes are slightly larger, which would make the process weights even higher.									
² Green densities are much higher, so that process weights at the beginning of the process are much higher.									
The above calculations "bracket" all combinations of throughput and time scenarios and therefore represent all worst-case conditions. Since actual emission rates are far below allowable rates, the kilns are always in compliance with the Process . Weight Rate Rule. In fact, since emissions are generally below one lb/hr, the rule rarely applies.									

ATTACHMENT 2
Process Weight Rate
Edge Sealing Operation

Demonstration of Compliance With The Process Weight Rate Rule for the Edge Sealing Operation at SMC Lumber Drying Division								
Max Production Rate =	10	panels/min						
Coverage Rate =	300	sq. ft/gal						
Bulk Density =	8.42	lb/gal						
Solids =	0.7081	lb/gal (8.41 percent)						
Proportion of Solids in Aerosol Form =	0.50	(50 percent) ¹						
Assumed Wood Density =	30.00	lb/ft ³						
Panel Thickness	Production Rate (panels/min)	Amt. Sealer Used (gal/hr.)	Amt. Sealer Used (lb/hr.)	Amt. Solids Applied (lb/hr)	Panel Wt (lb/panel)	Total Wt. Wood Treated (lb/hr)	Allowable Process Wt. Rate (lb/hr)	Estimated Emissions ¹
1	10	4.00	33.68	2.83	80.0	48,000	16.28	1.42
0.875	10	3.50	29.47	2.48	70.0	42,000	15.75	1.24
0.75	10	3.00	25.26	2.12	60.0	36,000	15.15	1.06
0.5	10	2.00	16.84	1.42	40.0	24,000	13.69	0.71
0.375	10	1.50	12.63	1.06	30.0	18,000	12.74	0.53
1	7	2.80	23.576	1.98	80.0	33,600	14.89	0.99
0.875	8	2.80	23.576	1.98	70.0	33,600	14.89	0.99
0.75	9	2.70	22.734	1.91	60.0	32,400	14.76	0.96
¹ Assumes half of the solids applied is emitted as particulate matter (a very conservatively high assumption).								
The above calculations represent all worst-case conditions. Since actual emission rates are below allowable rates, for all these conditions, the system is always in compliance with the Process Weight Rate Rule. In fact, since emissions are generally below one lb/hr, the rule only applies for thick panels at the maximum production rate.								

ATTACHMENT 3
Response to Public comments

**Response to Public Comments
Submitted During the Public Comment Period
for the Potlatch St. Maries Tier I Operating Permit
AIRS Facility No. 009-00030**

A public comment period was held from August 8 through September 10, 2002 to let any interested party review and comment on the draft Tier I operating permit prepared by the Department for the Potlatch St. Maries facility. A public hearing was held September 9, 2002. In accordance with IDAPA 58.01.01.364 (*Rules for the Control of Air Pollution in Idaho*), "all Tier I operating permit proceedings shall provide for public notice and public comment, including offering an opportunity for a hearing, on a draft permit or on a draft denial." Copies of the draft permit and technical memorandum were made available at the St. Maries Public Library, the Departments Coeur d'Alene Regional Office, and the Departments state office in Boise. The states of Montana and Washington and the Coeur d'Alene Tribe are affected states, and as such, the Department is required to provide copies of the public comment package for their review and comment. Affected states are defined in IDAPA 58.01.01.008.01 as: "All states whose air quality may be affected by the emissions of the Tier I source and that are contiguous to Idaho or that are within 50 miles of the Tier I source."

The only party that provided comments during the public comment period was the Potlatch St. Maries facility. This document provides the Departments response to the comments submitted. Each comment is listed with the Departments response immediately following.

Comment No. 1

Potlatch objects to the issuance of the permit for the Lumber Drying Division in the absence of a draft permit from EPA for the St. Maries Complex. Although, the company has set aside its disagreement with the Department regarding whether the facilities are appropriately permitted as one source, this unusual situation presents a likelihood of confusion and administrative redundancy that could be avoided by better coordination between the permitting agencies. Without a draft of the EPA permit covering the additional St. Maries Complex operations, Potlatch cannot fairly judge the reasonableness of the terms and conditions of this draft permit. Potlatch requests that the Department reconsider issuance of this permit at this time and develop a joint approach with EPA for issuance of the necessary permits for the source.

Response to Comment No. 1

The Department has committed to EPA Region 10 to issue all initial Tier I operating permits by December 31, 2002. Potlatch was provided an opportunity to comment on the Departments portion of the permit (Part 70). The Department acted on all relevant comments submitted by Potlatch by incorporating them into the proposed permit. EPA will provide Potlatch the opportunity to comment on their portion of the permit (Part 71).

Comment No. 2

Opacity observations are unnecessary for the Dry Kilns and Oil and Edge Seal Process.

Sections 4.3 (dry kilns) and 5.5 (Oil and Edge Seal Process) require one-minute observations once per week and subsequent Method 9 observations, if any visual emissions are detected.

Opacity violations are never an issue for steam-heated dry kilns, so that the proposed observations would require a lot of effort for absolutely no environmental benefit. Moreover, the kilns have literally dozens of vents, which emit plumes of water vapor during cool weather, so that it would be extremely difficult, if not impossible, to attempt to observe, let alone "read" each vent. The permit term in Section 4.3 should be deleted, and the Permit should state that no compliance demonstration is necessary because, based upon technical understandings of dry kiln operation, there is no likelihood for non-compliance with the opacity standard. Moreover, Potlatch has already submitted calculations to IDEQ that demonstrate that it is impossible for the dry kilns to be out of compliance with the Process Weight Rate Rule, so there is no reason to conduct visible emissions inspections to demonstrate compliance with that rule (see supplementary information provided for the Tier I permit application).

There is also absolutely not possibility that the Oil and Edge Seal process could produce a visible plume. Also, there is no stack; the VOCs are emitted into the building and exit the doors and any other openings in the building. Therefore, it would be impossible for Potlatch personnel to conduct opacity observations on this source. Section 5.5 should be deleted and IDEQ should indicate that no compliance demonstration is necessary, because there is no likelihood of a plume.

It is especially troubling to Potlatch that weekly observations are proposed for these sources, since all the other Title V permit drafts and proposals which Potlatch has received at its mills have initially proposed only monthly observations.

If DEQ insists on monitoring, then the initial monitoring frequency should be monthly, and frequency should change to quarterly, after four consecutive observations indicating no emissions. During the IDEQ-industry negotiations associated with the Pilot Operating Permit Program, it was generally agreed that the Title V permits would allow a decreased frequency monitoring in those cases where repeated observations indicted compliance. Moreover, DEQ reaffirmed this agreement during a meeting between DEQ and Idaho Forest Association representatives on August 20, 2002.

If not deleted from the permit because there is no likelihood of emissions, then wording such as the following is suggested for the Sections listed above:

The Permittee shall conduct monthly one-minute observations of each affected emissions point or source using EPA Method 22 in 40 CFR Part 60, Appendix A). If visible particulate matter emissions are observed for any emissions point, a six-minute observation using EPA Method 9 shall be conducted. If four consecutive observations indicate that opacity is below 20 percent, the frequency of observations decreases to once per quarter. If any quarterly Method 9 observation indicates opacity is greater than 20 percent, observation frequency reverts to monthly (note: this language has already been incorporated into Potlatch's Post Falls Particleboard draft permit by IDEQ).

Response to Comment No. 2

Permit Condition 4.3

The Department has changed the permit in response to Comment No. 2. Permit Conditions 4.3 now requires the following:

The permittee shall conduct monthly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible particulate matter emissions are observed for any emissions point, a six-minute observation using EPA Method 9 shall be conducted. The visible emissions evaluation shall be performed during daylight hours under normal operating conditions. The results of each evaluation shall be recorded and maintained as required in Permit Condition 2.11. If four consecutive monthly Method 22 observations indicate that no visible particulate matter emissions are observed from any of the four observations or if four consecutive monthly six-minute observations using Method 9 indicate that opacity is below 20 percent for each of the four six-minute observations, or any combination of four consecutive monthly Method 22 or Method 9 observations, the frequency of observations decreases to once per quarter. If any quarterly Method 9 observation indicates opacity is greater than 20 percent, the observation frequency reverts to monthly.

Permit Condition 5.5

Permit Condition 5.5 (public comment draft), visible emissions monitoring and recordkeeping, is not applicable since there is no emissions point associated with this process (i.e. emissions are released into the building housing the process). This requirement is not a permit condition in the proposed permit.

Comment No. 3

Facility-Wide Conditions

Visible Emissions, Section 2.8

This section states: "In addition to the specific requirements in Permit Conditions 3.2, 4.3, and 5.5, the permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions..." It is not clear whether those emission units covered by the unit-specific permit conditions are also covered by Section 2.8. It is Potlatch's understanding that this general requirement does not apply to the emission units that are addressed in Permit Conditions 3.2, 4.3, and 5.5. Otherwise, the permit could be interpreted as requiring two separate inspections of these emission units each month. Moreover, in cases where the unit-specific permit conditions require visible emissions observations only once per quarter, this section would require additional observations, thereby effectively changing the quarterly observation requirement to a monthly requirement. To resolve this problem, Potlatch requests that the wording of the first sentence in this section be changed as follows: "The permittee shall conduct a monthly facility-wide inspection of those potential sources of visible emissions that are not covered by Permit Conditions 3.2, 4.3, and 5.5 during daylight hours and under normal operating conditions." This change is consistent with the description at 5.1.3.2 of the Technical Memorandum.

Response to Comment No. 3

The permit has been changed in response to Comment No. 3. Permit Condition 5.5 of the draft permit is not an applicable permit condition in the proposed permit (see response to Comment No. 2).

Comment No. 4

General Provision 21 [Permit Condition 2.11] is incorrectly cited on the top of page 7; General Provision 8.21 should be cited.

Response to Comment No. 4

Comment No. 4 was submitted in response to a draft permit the Department provided to Potlatch prior to the public comment period. The public comment period draft permit does not contain section numbered General Provisions. In other words, the General Provisions are not Section 8, they are simply the last section of the permit. Therefore, Permit Condition 2.11 is correct by citing General Provision 21.

Comment No. 5

This section [Permit Condition 2.12] requires that test reports are due to IDEQ within 30 days of testing. Potlatch requests that this time be changed to 60 days, since it is often difficult for the contracted testing firms to complete the reports in 30 days, especially if the testing involves complex analytical procedures.

Response to Comment No. 5

This requirement is taken directly from the language of IDAPA 58.01.01.157.04, which states, in part:

"If the source test is performed to satisfy a performance test requirement imposed by state or federal regulations, rule, permit, order, or consent decree, a written report shall be submitted to the Department within thirty (30) days of the completion of the test."

Should Potlatch determine that additional time is required to submit the performance test report, the Department suggests Potlatch request the extension in the performance test protocol submitted prior to the test.

Comment No. 6

References to Method 201/202 in the Table should be deleted. There is no requirement to test for PM₁₀ in the draft permit, so this method does not apply at this time. In addition, there are various concerns about the suitability of this test method approach that have not been adequately addressed by EPA or the Department.

Response to Comment No. 6

The definition of PM₁₀ includes both the filterable particulate matter and condensable particulate matter. Compliance with a PM₁₀ emission limit is demonstrated using EPA Test Methods 201.a and 202 unless the facility demonstrates that there is no significant release of condensable. Although Potlatch currently has no emissions limit for PM₁₀, the facility must not cause or significantly contribute to a violation of the NAAQS for PM₁₀. The listing of standard test methods is, therefore, appropriate for pollutants potentially released by the facility. All emissions factors calculated for facility sources, including, but limited to those for fees, should be consistent with test method methodology.

Table 2.2 allows for Department-approved alternative test methods to be used in accordance with IDAPA 58.01.01.157.

Comment No. 7

The facility does not have threshold quantities of any substances that are regulated under 40 CFR 68. Therefore this condition should be deleted and the permit should provide a permit shield for these requirements.

Response to Comment No. 7

This permit condition is specifically required by the EPA and is contained in all Tier I operating permits. The proposed permit retains the requirement.

Comment No. 8

The facility is not subject to 40 CFR 82. Therefore this condition should be deleted and the permit should provide a permit shield for these requirements.

Response to Comment No. 8

See Response to Comment No. 7

Comment No. 9

Note: Please see the attached redlined version of this section. Potlatch plans to add a dry electrostatic precipitator (ESP) to the Hurst boiler by March 1, 2003. Thus, we request that IDEQ modify the draft permit to include this emission control device as required control equipment by March 1, 2003. This will require that many of the permit terms in this section be replaced by terms that address the ESP, as noted in the attached redlined version of Section 3. The rationale behind the proposed CAM plan is provided in the enclosed draft EPA CAM technical guidance document, titled "A25 Electrostatic Precipitator (ESP) for PM Control – Facility FF" (this document can be found on the Web at the following location: <http://www.epa.gov/ttn/emc/cam/camsupp2.pdf>)

Response to Comment No. 9

This comment does not constitute a permit application. Potlatch is required to compile and submit all information concerning the construction of the ESP to the Department for its technical and regulatory review. If the permit application contains all the required elements whereupon compliance is demonstrated, the Department will issue a PTC for the ESP. Potlatch is required to modify their Tier I operating permit in accordance with IDAPA 58.01.01.382.

Comment No. 10

This section requires the steaming rate to always be below 120% of the average rate measured during the most recent performance test. Potlatch is concerned that the section could be misinterpreted to disallow the exceedance of the maximum allowable steaming rate even during performance tests that are performed to raise the allowable rate, as provided in condition 3.7. Potlatch requests that the phrase, "Except during performance testing, as provided for in Condition 3.7," be inserted before the second sentence in the second paragraph (i.e., before the sentence, "Whenever the steaming rate exceeds...") to resolve this problem.

Response to Comment No. 10

Permit Condition 3.3 has been changed in response to Comment No. 10.

Comment No. 11

The meaning of this requirement is unclear. It appears that the addition of the word "equipment" after the word "monitoring" would resolve the problem (see attached redlined version).

Response to Comment No. 11

Monitoring, as defined by 40 CFR 64.1, does not imply "equipment" only. Refer to the definition of monitoring under 40 CFR 64.1. The proposed permit has not been changed in response to this comment.

Comment No. 12

It is not necessary or reasonable to monitor opacity for this unit (lumber drying kilns). Please see Item B in the General Comments Section for additional details.

Response to Comment No. 12

See response to Comment No. 2

Comment No. 13

It is not necessary or feasible to monitor opacity for this unit (oil and edge seal process). Please see Item B in the General Comments Section for additional details.

Response to Comment No. 13

See response to Comment No. 2

Comment No. 14

The compliance schedule language has been revised in part in response to Comment No. 14 (see attached comments submitted by Potlatch). The compliance schedule in the proposed permit is as follows:

Response to Comment No. 14

6. Compliance Schedule

Potlatch shall implement the following compliance schedule to assure compliance with the applicable requirements in the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.01, et seq. The permittee shall obtain a combined facility-wide Tier II operating permit and PTC (hereafter referred to as the facility-wide permit) and a modified Tier I operating permit. The specific elements of the compliance schedule are summarized in Table 6.1 and specified in Permit Conditions 6.2 through 6.9.

Compliance Plan and Schedule

Table 6.1. COMPLIANCE SCHEDULE

PERMIT CONDITIONS	MILESTONE	DEADLINE	DOCUMENTATION / REPORTING
6.2	Submit complete facility-wide permit application to comply with IDAPA 58.01.01.400 through 410	180 days after issuance of the Tier I operating permit	Completeness letter from the Department
6.3	Concurrently submit complete application information to address the applicable PTC requirements in IDAPA 58.01.01.200 through 223 for those sources for which the permittee was required to, but did not obtain, a PTC	180 days after issuance of the Tier I operating permit	Completeness letter from the Department
6.4	Submit supplemental application information to address the applicable PTC requirements for any additional sources identified	Within 30 days of a request in writing by the Department during processing of the facility-wide permit	Completeness letter from the Department
6.7	Submit a request to modify the Tier I operating permit	30 days after the facility-wide permit application is found complete	Completeness letter from the Department
6.8	Submit quarterly progress reports	January 1, April 1, July 1, and October 1 of each year	

6.1 The following sources shall be addressed in the permit application required by this compliance schedule:

- Hurst wood and wood-waste fuel-fired boiler, serial number HYB-6500-150, constructed in 1987.
- Four, Coe/Moore lumber-drying kilns, constructed in 1987.

The permittee has the continuing responsibility to submit any supplementary information needed, including information for any other sources, in accordance with IDAPA 58.01.01.315.

6.2 Potlatch shall submit a complete permit application and all additional information requested by the Department for issuance of a facility-wide Tier II operating permit within 180 days of issuance of this Tier I operating permit. The application shall address the requirements for Tier II operating permits in accordance with IDAPA 58.01.01.400 through 410.

[IDAPA 58.01.01.322.10, 4/5/00]

6.3 In addition to the requirements for Tier II operating permits, the facility-wide permit application shall include all of the applicable information and address the applicable requirements for PTCs in accordance with IDAPA 58.01.01.200 through IDAPA 58.01.01.223 for the construction and/or modification of sources for which the permittee was required to, but did not obtain, a PTC. The Department has identified the sources listed in Permit Condition 6.1 as sources that failed to obtain a permit prior to construction or modification.

[IDAPA 58.01.01.322.10, 4/5/00]

6.4 If through the development of the facility-wide permit, it is determined that the facility should have obtained a PTC or a PTC modification for any other source or sources at the facility, the permittee shall submit a supplemental application that addresses the applicable requirements for PTCs within 30 days of receiving written notification from the Department.

[IDAPA 58.01.01.322.10, 4/5/00]

- 6.5 The application submittal deadlines set forth in the compliance schedule may be extended if the permittee clearly demonstrates that additional time is needed to collect new data for submittal of a complete application. Extension requests, with complete information to justify the request, must be submitted in writing to the Department no later than the midpoint of the milestone timeline. The deadlines may be extended for up to one year through written authorization from the Department.
[IDAPA 58.01.01.322.10, 4/5/00]
- 6.6 Upon receipt of a complete application, the Department will draft a single proposed facility-wide permit for the facility. The permit will contain all of the terms and conditions necessary to comply with the applicable requirements for PTCs in accordance with IDAPA 58.01.01.200 through 223 and the requirements for Tier II operating permits in accordance with IDAPA 58.01.01.400 through 410. The permit will clearly identify the origin and basis for each term and condition. The procedures for issuing a PTC under IDAPA 58.01.01.209 shall be followed concurrently with the procedures for issuing a Tier II operating permit under IDAPA 58.01.01.404.
[IDAPA 58.01.01.322.10, 4/5/00]
- 6.7 Potlatch shall request a modification to their Tier I operating permit within 30 days after the combined facility-wide Tier II operating permit and PTC application is determined complete by the Department. The Tier I operating permit shall be modified to incorporate all applicable requirements of the facility-wide permit and shall be issued concurrently with the facility-wide permit in accordance with the procedures for issuing a Tier I permit in IDAPA 58.01.01.360 through 369.
[IDAPA 58.01.01.322.10, 4/5/00]
- 6.8 Until such time that a modified Tier I operating permit is issued pursuant to Permit Condition 6.7, Potlatch shall submit a progress report each calendar quarter to the Department stating when each of the milestones and compliance with each condition in the compliance schedule were or will be achieved, and an explanation of why any dates were not or will not be met and a detailed description of any preventative or corrective measures undertaken by the permittee.
[IDAPA 58.01.01.322.10, 4/5/00]
- 6.9 This schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
[IDAPA 58.01.01.322.10, 4/5/00]

Comments on Technical Memorandum

Comment No. 15

Section 2. Summary of Events (see attached comments submitted by Potlatch)

Response to Comment No. 15

The Department has revised the technical memorandum in response to Comment No. 15. The chronology submitted by Potlatch has not been incorporated verbatim. On-going negotiations between the Department and Potlatch concerning permit applicability resulted in permit issuance delays.

Comment No. 16

Please reword the first bulleted item, as follows (Emissions Description):

- One Hurst wood and waste-wood fired boiler, serial number HB-6500-160, built in 1987 that produces steam at a maximum rate of 34,500 lb/hr and controls particulate emissions with a multiclone. A McGill electrostatic precipitator will be added to control particulate matter emissions by March 1, 2003.

Response to Comment No. 16

The technical memorandum has been changed in response to Comment No. 16.

Comment No. 17

5.1.3 Visible Emissions

5.1.3.1 Requirement

Potlatch requests that this section of the technical memorandum indicate that "appropriate corrective action" can mean no action in certain circumstances. Please refer to the comments for Section 2.8 of the permit.

Response to Comment No. 17

Visible emissions cannot exceed 20% opacity for more than three minutes in any 60-minute period. If visible emissions exceed the standard, Potlatch is required by Permit Condition 2.8 to assess the conditions existing at the time visible emissions are observed, take appropriate corrective action, and record the action taken. Obviously, if the opacity standard is exceeded, there must be some reason, which in turn requires corrective action. The Department requires Potlatch assess this situation, take whatever action is necessary to correct the problem, and record the corrective action taken.

Comment No. 18

5.1.8 Test Methods

In paragraph no. 2, it is stated that the specific reference test method and averaging times for each emissions unit must be identified in the permit. During an August 20, 2002 meeting between representatives of EQ and the Idaho Forest Association, DEQ agreed that this is not the case. Therefore, this statement should be omitted.

Response to Comment No. 18

This statement has been removed from the technical memorandum in response to Comment No. 18.

Comment No. 19

Section 6.1.1 Boiler Description

It is stated that the maximum fueling rate for the Hurst boiler is 10,627 pounds of wood fuel per hour. This is inaccurate and any reference to the amount of wood combusted should be deleted, since the maximum fueling rate is unknown. The fueling rate is dependent upon fuel moisture content and steam production.

Response to Comment No. 19

The Department simply restated the fueling rate based on the information submitted in Potlatch's permit application. Since the information is inaccurate, the Department has removed the statement from the technical memorandum.

Comment No. 20

Section 6.1.3 Compliance Demonstration

It is indicated that the performance test will be conducted within 6 months of permit issuance. This is inconsistent with the proposed permit, which properly allows 12 months.

Response to Comment No. 20

The technical memorandum has been changed in response to Comment No. 20.

Comment No. 21

All of Section 6 should be modified to address requirements for the electrostatic precipitator, instead of the multiclone.

Response to Comment No. 21

Operations of the ESP are not the applicable requirements at the time of permit issuance (see Response to Comment No. 9). The permit retains the requirements for the multiclone.

END OF COMMENTS

Potlatch

Potlatch Corporation
Wood Products, Western Division

St. Maries Complex
2200 Railroad Avenue
St. Maries, Idaho 83861
Telephone (208) 245-2585
Fax (208) 245-7542

September 3, 2002

Mr. Bill Rogers
Title V Permit Coordinator
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706-1290

Re: Facility Review of Proposed Tier I Operating Permit No. 009-00030 for Potlatch Corporation's St. Maries Lumber Drying Division.

Dear Mr. Rogers:

Enclosed are Potlatch's comments on the proposed Tier I Operating Permit for Potlatch Corporation's St. Maries Lumber Drying Division in St. Maries, ID.

If you need additional information, please contact me at 208-245-2585 or Bernie Wilmarth at (208) 799-7517.

In accordance with IDAPA 16.01.01, Section 123, I certify, based on information and belief formed after reasonable inquiry, the statements and information in this letter are true, accurate and complete.

Sincerely,



Greg Cooperrider
Plant Manager

Enclosures

cc: Tom Harman/IDEQ Coeur d'Alene
Bernie Wilmarth
John Emery
Dana Schmitz

LDtier1coverLET2_083002

RECEIVED

SEP 11 2002

DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A.Q. PROGRAM

reaffirmed this agreement during a meeting between DEQ and Idaho Forest Association representatives on August 20, 2002.

If not deleted from the permit because there is no likelihood of emissions, then wording such as the following is suggested for the Sections listed above:

The Permittee shall conduct monthly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible particulate matter emissions are observed for any emissions point, a six-minute observation using EPA Method 9 shall be conducted. If four consecutive observations indicate that opacity is below 20 percent, the frequency of observations decreases to once per quarter. If any quarterly Method 9 observation indicates opacity is greater than 20 percent, observation frequency reverts to monthly (note: this language has already been incorporated into Pottlatch's Post Falls Particleboard draft permit by IDEQ).

II. COMMENTS ON SPECIFIC SECTIONS OF THE PERMIT

2. FACILITY-WIDE CONDITIONS

Visible Emissions

Section 2.8

This section states: "In addition to the specific requirements in Permit Conditions 3.2, 4.3, and 5.5, the permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions..." It is not clear whether those emission units covered by the unit-specific permit conditions are also covered by Section 2.8. It is Pottlatch's understanding that this general requirement does not apply to the emission units that are addressed in Permit Conditions 3.2, 4.3, and 5.5. Otherwise, the permit could be interpreted as requiring two separate inspections of these emission units each month. Moreover, in cases where the unit-specific permit conditions require visible emissions observations only once per quarter, this section would require additional observations, thereby effectively changing the quarterly observation requirement to a monthly requirement. To resolve this problem, Pottlatch requests that the wording of the first sentence in this section be changed as follows: "The permittee shall conduct a monthly facility-wide inspection of those potential sources of visible emissions that are not covered by Permit Conditions 3.2, 4.3, and 5.5 during daylight hours and under normal operating conditions." This change is consistent with the description at 5.1.3.2 of the Technical Memorandum.

Reports and Certifications

Section 2.11

General Provision 21 is incorrectly cited on the top of page 7; General Provision 8.21 should be cited.

Compliance Testing

Section 2.12

This section requires that test reports are due to IDEQ within 30 days of testing. Pottlatch requests that this time be changed to 60 days, since it is often difficult for the contracted testing firms to complete the reports in 30 days, especially if the testing involves complex analytical procedures.

Test Methods

5. OIL AND EDGE-SEAL PROCESS

Monitoring and Recordkeeping Requirements

Section 5.5

It is not necessary or feasible to monitor opacity for this unit. Please see Item B in the General Comments Section for additional details.

6. COMPLIANCE SCHEDULE

Compliance Plan and Schedule

Potlatch strongly objects the form and content of the Compliance Schedule at Section 6 of the draft permit. IDEQ and Potlatch have discussed the circumstances regarding the transfer of the original permit from the facility's prior owner. In good faith, Potlatch attempted to work with IDEQ to transfer the permit; however, action was never taken by the agency. Potlatch is not out of compliance at this time and rejects any statement of such status. Potlatch has agreed to obtain a Tier II operating permit, but cannot accept the current format of the compliance schedule. A revised draft is attached to these comments for your consideration.

As presented, this format is inaccurate and prejudicial for the following reasons: First, these conclusions about Potlatch's compliance status are incorrect. The units for which IDEQ claims no permit was obtained were, in fact, permitted when constructed by the prior owner. The only deficiency in the permitting history is that IDEQ failed to transfer these permits to Potlatch despite conversations with the agency regarding this informal process and the submittal of two applications by Potlatch to do so. The Rules do not prescribe a method for transfer of a permit. Consequently, Potlatch and IDEQ worked together over the years to identify the best course of action. Although no action was ever taken by IDEQ, Potlatch submitted applications to affect the change. Moreover, even if a violation of applicable regulations could be alleged against Potlatch in this situation, defendants in formal enforcement actions are provided benign language in consent agreements that expressly "neither admit nor deny" the alleged liability (or compliance status) for the allegations presented. Consequently, the current Tier I format positions Potlatch even more disadvantageously than true defendants in formal enforcement actions and is, therefore, unacceptable.

Second, Potlatch cannot accept this format as the conclusory statements could be used by a citizen's group as the basis of a third party enforcement action against our company. At a minimum the current format could provide a viable basis for standing in such a suit and could even be prima facie evidence of liability. This would force Potlatch to defend a third party action and even if the third party did not prevail, the litigation costs of such a defense could be high. Potlatch agreed to obtain a permit and will cooperate through the permitting process. Subjecting Potlatch to third party liability is unreasonable and prejudicial.

In addition, the deadlines in the draft compliance schedule require a complete permit application to be submitted within 180 days of issuance of the Tier I permit. As provided by the Rules, IDEQ has 30 days to determine an application complete (IDAPA 58.01.01.209.01 and 404.01). This means that Potlatch's application must be submitted no later than 150 days of issuance to provide IDEQ the full timeframe to make a completeness determination. This is a shorter timeframe than anticipated by Potlatch during conversations with IDEQ. If the agency intends to provide a full 180 days for preparation and submittal of the application, then the proposed edits should be incorporated into the compliance schedule. The completeness determination will follow based upon IDEQ's responsiveness to the application. Language in Section 10 of the Technical Memorandum suggests that IDEQ expects the permit to be submitted and completeness determined within the 180 days. This is unreasonable, in light of the lack of control that Potlatch has over when IDEQ acts to determine the application complete.

(Suggested additional and revised wording is shown in italics)

August 19, 1996. Please modify the last sentence of the entry to read as follows: "Pottlatch applied for the Tier II *permit* in order to establish limitations to keep emissions below the 100-ton per year threshold for Tier I sources, *and to replace the Permit to Construct that was obtained by Edwards Forest Industries, Inc.*"

October 9, 1996 The text should read as follows: "In a letter from DEQ to Pottlatch, DEQ indicates that staff have reviewed the Tier II permit application and that the Pottlatch St. Maries mill and the Lumber Drying Division (on state land) are one facility because the lumber drying site accepts only lumber from Pottlatch's St. Maries mill."

Please add the following entry to the chronology:

December 18, 1998 *Pottlatch sends a letter to IDEQ, which confirms discussions between Pottlatch and DEQ, wherein DEQ indicated that the Agency is in the process of reissuing a Permit to Construct for the Lumber Drying Division. The letter also confirms Pottlatch's prior verbal agreement to allow DEQ additional time beyond the deadline prescribed in IDAPA 16.01.01.209.01.b to issue the permit."*

Please add the following entry to the chronology:

January 6, 1999 *Pottlatch sends a letter to DEQ which provides a chronology of correspondence between Pottlatch and DEQ relating to permitting the facility, as a follow-up to a November 19, 1998 meeting in Boise between Pottlatch and DEQ representatives.*

June 6, 2000 This entry indicates that Pottlatch submitted another Tier II permit application on June 6, 2000. This is incorrect. Pottlatch has no records of a submittal on June 6, 2000. As indicated earlier in the chronology, DEQ received a Tier II application from Pottlatch on August 19, 1996. This entry should be deleted.

Please add the following entry to the chronology:

August 31, 1999 *Tom Harmon, DEQ, sends letter to Pottlatch, informing Pottlatch that an inspection of the facility revealed that the facility is out of compliance, because it had not obtained a new PTC.*

Please add the following entry to the chronology:

September 28, 1999 *Pottlatch responds to DEQ's letter of August 31, 1999, stating that the facility attempted twice to obtain a permit to cover the emission units, once on August 14, 1996 (Tier II permit application), and again on September 1, 1998 (PTC application).*

Please add the following entry to the chronology:

October 4, 2000 *Pottlatch writes to DEQ, acknowledging receipt of DEQ's September 26, 2000 completeness determination and indicating that the Tier II application was submitted on August 14, 1996, not on June 6, 2000, as mistakenly indicated in DEQ's September 26, 2000 letter.*

3. HURST BOILER

Summary Description

Table 3.1 below describes the devices used in controlling emissions from the Hurst boiler.

Table 3.1. EMISSIONS UNIT AND EMISSIONS CONTROL DEVICE

Emissions Unit	Emissions Control Device
Hurst boiler	Electrostatic Precipitator

Deleted: Multiclone

Table 3.2 contains a summary of the requirements that apply to the Hurst boiler. Specific permit requirements are listed below Table 3.2.

Table 3.2. APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring & Recordkeeping Requirements
3.1	Grain loading	0.08 gr/dscf at 8% oxygen	IDAPA 58.01.01.676	3.3, 3.5, 3.6, 3.9, 3.10, 3.18
3.2	Visible emissions	20% opacity for no more than three minutes in any 60-minute period	IDAPA 58.01.01.625	2.8, 3.3, 3.5, 3.6, 3.10, 3.18
3.3	Steam production rate	120% of the steam production rate measured in the most recent compliance test	IDAPA 58.01.01.322.01	3.4, 3.8

Note to IDEQ: Would it be appropriate to add a condition requiring the installation of the ESP by March 1, 2003 to this table?

Permit Limits / Standard Summary

- 3.1 The facility shall comply with the fuel-burning equipment particulate matter standards specified in Permit Condition 2.14.

IDAPA 58.01.01.676, 677, 5/1/94]

- 3.2 The facility shall comply with the visible emissions limitation specified in Permit Condition 2.7.

[IDAPA 58.01.01.625, 4/5/00]

- 3.3 The average steaming rate is defined as the running hourly average of the steaming rates, as determined from a continuous steaming rate recorder. The average steaming rate shall be maintained at or below 120% of the average steaming rate attained during the most recent compliance test conducted pursuant to the permit that demonstrated compliance with Permit Condition 3.1. If the tested emission rate is above 0.167 grains per dry standard cubic foot at 8% oxygen, when combusting wood product, the maximum allowable average steaming rate shall be limited to the steaming rate obtained by the following equation:

Deleted: maximum instantaneous

Deleted: the three highest hourly instantaneous steaming rates, as observed on the continuous chart recording.

Deleted: maximum instantaneous

Deleted: g

Deleted:

Deleted: instantaneous

RECEIVED

SEP 11 2002

DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A Q PROGRAM

3.8 The permittee shall monitor and record the following information during each compliance test:

- Visible emissions, using the methods and procedures contained in IDAPA 58.01.01.625
- Steam production rate, expressed as pounds of steam per hour (lb/hr)
- Wood-waste fuel analysis
- ~~Power input to the electrostatic precipitator (the sum of the secondary voltage times secondary current for both transformer-rectifiers, or $P = V_1 I_1 + V_2 I_2$)~~

~~Deleted: Pressure drop across the multiclones~~

[IDAPA 58.01.01.322.06, 5/1/94; 40 CFR 64.4(c)(1)]

3.9 The ~~dry electrostatic precipitator~~ shall be used to control particulate emissions from the Hurst boiler whenever the boiler is operating.

~~Deleted: multiclones~~

[IDAPA 58.01.01.322.01, 3/19/99]

3.10 An O&M manual shall be developed within 60 days of issuance of this permit. The O&M manual shall be updated as necessary and shall include, at a minimum, the most recent general descriptions of the equipment; the normal operating conditions and procedures for the boiler; startup, shutdown, and maintenance procedures; upset conditions guidelines; and corrective action procedures.

[IDAPA 58.01.01.322.06, 07, 5/1/94; 40 CFR 64.3]

3.11 At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR 64.7(b), 64.6(c)(3)]

3.12 Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero-and-span adjustments), the permittee shall collect data from the ~~electrostatic precipitator~~ monitoring system at all required intervals and at all times the Hurst boiler is operating, as required by 40 CFR 64.7(c).

~~Deleted: for~~

~~Deleted: multiclone pressure drop~~

[40 CFR 64.7(c), 64.6(c)(3)]

3.13 Upon detection of an excursion or exceedance, the permittee shall restore operation of the Hurst boiler, the ~~electrostatic precipitator~~, and the ~~power input~~ monitoring system to their normal or usual manner of operation as expeditiously as practicable, in accordance with good air pollution control practices for minimizing emissions, and in accordance with the provisions of 40 CFR 64.7(d).

~~Deleted: the multiclone~~

~~Deleted: pressure drop~~

~~Deleted:~~

~~Deleted:~~

[40 CFR 64.7(d), 64.6(c)(3)]

3.14 If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which approved monitoring did not provide indication of an excursion or exceedance while providing valid data, or the results of compliance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Department and, if necessary, submit a proposed modification to this operating permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e), 64.6(c)(3)]

Reporting

- 3.19 If existing data from unit-specific compliance testing, as required by Permit Conditions 3.5 and 3.7 are not available, the permittee shall submit a test plan and schedule for obtaining such data in accordance with 40 CFR 64.4(e), or may submit indicator ranges (or procedures for establishing indicator ranges) that rely on engineering assessments and other data, provided that the permittee demonstrates that factors specific to the type of monitoring, control device, or pollutant-specific emissions unit make compliance testing unnecessary to establish indicator ranges at levels that satisfy the criteria in 40 CFR 64.3(a).

[40 CFR 64.4(d)]

- 3.20 The permittee shall submit a report to the Department, in accordance with Permit Condition 2.17, for the compliance test required by Permit Condition 3.5.

[DAPA 58.01.01.322.06.c, 06.d, 08.a, 09, 5/1/94]

- 3.21 The permittee shall submit a report for monitoring required by 40 CFR 64. The report shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable:

- Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken.
- Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero-and-span or other daily calibration checks, if applicable).
- A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

[40 CFR 64.9(a)]

- 3.22 The owner or operator shall comply with the recordkeeping requirements specified in 40 CFR 70.6(a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to 40 CFR 64.8, and any activities undertaken to implement a QIP, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

[40 CFR 64.9(b)]

Deleted: LDDtitleVcomments2a_080902.doc

Deleted: 9/3/2002

Inserted: LDDtitleVcomments2a_080902.doc

Deleted: Document15

Inserted: 9/3/2002

Deleted: 8/14/2002

AIR QUALITY TIER I OPERATING PERMIT NUMBER: 009-00030

Permittee: Potlatch Corp. - Lumber Drying Division
Location: St. Maries, Idaho

Date Issued: PUBLIC COMMENT DRAFT
Date Expires:

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

6. COMPLIANCE SCHEDULE

Potlatch is not in compliance at the time of issuance of the Tier I operating permit with the applicable PTC requirements for sources listed in Permit Condition 6.1. Potlatch shall implement the following compliance schedule to ensure To bring the facility into compliance with the applicable requirements in the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.01, et seq., the permittee shall obtain a combined facility-wide Tier II operating permit and PTC (hereafter referred to as the facility wide permit) and a modified Tier I operating permit. The specific elements of the compliance schedule are summarized in Table 6.1 and specified in Permit Conditions 6.2 through 6.9.

Compliance Plan and Schedule

Table 6.1. COMPLIANCE SCHEDULE

PERMIT CONDITIONS	MILESTONE	DEADLINE	DOCUMENTATION / REPORTING
6.2	Submit complete a facility-wide permit application to comply with IDAPA 58.01.01.400 through 410	180 days after issuance of the Tier I operating permit	Completeness letter from the Department
6.3	Concurrently submit complete application information to address the applicable PTC requirements in IDAPA 58.01.01.200 through 223 for those sources for which the permittee was required to, but did not obtain, that may have required a PTC	180 days after issuance of the Tier I operating permit	Completeness letter from the Department
6.4	Submit supplemental application information to address the applicable PTC requirements for any additional sources identified	Within 30 days of a request in writing by the Department during processing of the facility-wide permit	Completeness letter from the Department
6.7	Submit a request to modify the Tier I operating permit	30 days after the facility-wide permit application is found complete	Completeness letter from the Department
6.8	Submit quarterly progress reports	January 1, April 1, July 1, and October 1 of each year	

6.1 The Department identified the following sources as sources that are not in compliance because Potlatch does not have a PTC. The following sources shall be addressed in the permit applications required by this compliance schedule:

- Hurst wood and wood-waste fuel-fired boiler, serial number HYB-6500-150, constructed in 1987.
- Four, Coe/Moore lumber-drying kilns, constructed in 1987.

The permittee has the continuing responsibility to submit any supplementary information needed, including information for any other sources, in accordance with IDAPA 58.01.01.315.

AIR QUALITY TIER I OPERATING PERMIT NUMBER: 009-00030

Permittee: Pottlatch Corp. - Lumber Drying Division **Date Issued:** PUBLIC COMMENT DRAFT
Location: St. Maries, Idaho **Date Expires:**

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

6.9 This schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

[IDAPA 58.01.01.322.10, 4/5/00]

EXAMPLE COMPLIANCE ASSURANCE MONITORING
ELECTROSTATIC PRECIPITATOR (ESP) FOR PM CONTROL: FACILITY FF

I. Background

A. Emissions Unit

Description: Coal-fired boilers
Identification: B001, B002, B003
APCD ID: ESP1, ESP2, ESP3
Facility: Facility FF
Anytown, USA

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation: Permit, State regulation
Emissions Limits:
PM: 0.137 lb/mmBtu
Current monitoring requirements: None.

C. Control Technology: Electrostatic precipitator.

II. Monitoring Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table A.25-1. Secondary voltage and current are monitored in each field and the power input to each ESP is determined.

DRAFT

electrode (the negatively charged electrode). The negatively charged particles then migrate toward the positively charged collection electrodes. The particulate matter is separated from the gas stream by retention on the collection electrode. Particulate is removed from the collection plates by shaking or rapping the plates.

As a general rule, ESP performance improves as total power input increases. This relationship is true when particulate matter and gas stream properties (such as PM concentration, size distribution, resistivity, and gas flow rate) remain stable and all equipment components (such as rappers, plates, wires, hoppers, and transformer-rectifiers) operate satisfactorily. In an ESP with many fields, the power distribution also plays a key role in the performance of the ESP. In this case, however, measurement of total power input is acceptable because the ESP has only two fields.

The secondary voltage drops when a malfunction, such as grounded electrodes, occurs in the ESP. When the secondary voltage drops, less particulate is charged and collected. Also, the secondary voltage can remain high but fail to perform its function if the collection plates are not cleaned, or rapped, appropriately. If the collection plates are not cleaned, the current drops. Thus, since the power is the product of the voltage and the current, monitoring the power input will provide a reasonable assurance that the ESP is functioning properly. In other words, problems that would be detected by monitoring other parameters individually also will be manifested in the power input.

III. Rationale for Selection of Indicator Ranges

The total power input to the ESP is the sum of the products of the secondary voltage and secondary current for each field. An excursion is defined as an hourly average ESP power input less than 15 kW. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported.

The indicator range for the ESP power was selected based upon the level indicated from recent operation. The normal operating voltage is set at the highest level achievable without having an excessive spark rate. Based on field experience, power levels less than 5 kW during normal operation result in opacity readings that approach 20 percent (typically the opacity of the ESP exhaust is less than 5 percent). During abnormal operation or malfunction, the ESP power levels are appreciably lower than normal operational levels. Table A.25-2 shows that during normal operating conditions, the total ESP power input for boiler No. 2 typically is between 18 and 22 kW. If one field in the ESP goes out of service, the total power input drops below 15 kW.

The opacity normally is below 5 percent. The opacities were measured using a continuous opacity monitor installed in the boiler exhaust stack; however, the equipment does not meet the criteria in 40 CFR 60, Appendix B, Performance Specification 1. Therefore, it is not used for compliance monitoring. In addition, compliance with the boiler's 20 percent opacity limit would not necessarily indicate compliance with the PM limit, and continuous opacity monitoring is not required of this source.